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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,046	02/28/2006	Klaus Tank	930092-2011	6029
7590 Ronald R Santucci Frommer Lawrence & Haug 745 Fifth Avenue New York, NY 10151			EXAMINER ANDREWS, DAVID L	
			ART UNIT 3672	PAPER NUMBER
			MAIL DATE 08/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,046	Applicant(s) TANK ET AL.	
	Examiner David Andrews	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/28/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/28/2005</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Scott et al. (US 5,979,571). Scott et al. disclose a tool insert comprising: a substrate (22); a layer of ultra-hard abrasive material (24) having a top and side surface and a primary cutting edge; a protective layer (figures 6, 8, 10, 12) to protect the cutting edge and providing a secondary cutting edge (26) with a depth selected to be sufficient to protect the primary cutting edge whilst cutting a window through a first substance but to expose the primary cutting edge upon encountering a second substance (col. 2, lines 26-39); wherein the substrate is tungsten carbide (col. 2, lines 45-49); wherein the protective layer is integrally formed with the substrate and the same material (figures 6, 8, 10); wherein the protective layer is formed as a separate component in situ (figure 12; col. 5, lines 47-50); wherein the protective layer is formed as a separate component and bonded to the top surface or side surface of the ultra-hard material (col. 5, lines 62+); wherein the layer is provided in the form of a ring located about the periphery of the ultra-hard material (figures 5, 7, or 9 show the layer as ring about the ultra-hard material); wherein the protective layer is an overlayer bonded to the top surface of the ultra-hard material (figures 11, 12); wherein the protective layer forms a segment which

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is bonded to the substrate adjacent the layer of ultra-hard material (figure 11 shows protective layer 30 which bonded as in col. 5, lines 60+ is considered to be on the substrate adjacent the ultra-hard layer); wherein the protective layer is formed of the same type of material as the substrate but a different grade (col. 5, lines 62+ would provide a different grade of WC); wherein the first substance is casing and the second is bedrock (col. 2, lines 27-45). Scott et al. also disclose a method of drilling an angled hole comprising the steps in claims 12-14 (col. 2, lines 23+).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scott et al. in view of Mattias et al. (US 2002/0074168). Scott et al. disclose all the limitations of claim 9 except for the a plurality of alternating strips of ultra-hard and protective layers. Mattias et al. disclose an insert with a plurality of ultra-hard material strips (figure 27A; 80) and protective layer strips (82) on the substrate, the successive strips providing a series of primary cutting edges and a series of secondary cutting edges (figure 27B). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the insert of Scott et al. with the strips of Mattias et al. in order to provide an insert with multiple cutting edges to cut more efficiently.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Desai et al. (US 6,612,383), Chaves et al. (US 6,009,963), Miess (US 6,003,623) and Tank (US 4,997,049) all disclose inserts with some protective layer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Andrews whose telephone number is (571) 272-6558. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


David Bagnell
Supervisory Patent Examiner
Art Unit 3672

DLA